

Name: _____

Per: _____

The Periodic Table : Exploring Metals Versus Non-Metals

1) List the 5 characteristics of metals and non-metals discovered in your reading last night.

Metals:

- 1.
- 2.
- 3.
- 4.
- 5.

Non-Metals

- 1.
- 2.
- 3.
- 4.
- 5.

2) Atoms that share properties of metals and non-metals are called _____.

3) Fill in the periodic table below by listing the elements listed in the table below (#4). Place their symbol in the correct location.

| | | | | | | | |
|---|---|---|--|--|--|--|----|
| | 1 | | | | | | 18 |
| 1 | | 2 | | | | | |
| 2 | | | | | | | |
| 3 | | | | | | | |
| 4 | | | | | | | |
| 5 | | | | | | | |

Transition Elements

4) Rotate from station to station and observe the appearance of the element, test to see if it conducts electricity, identify based on the shape of the pieces if it is malleable, ductile or brittle. From the tested and observed information **classify the element as a metal, non-metal or metalloid based on the characteristics of each (Listed in #1).**

| Element | Symbol | Appearance dull / shiny | conduct electricity yes / no | malleable / ductile / brittle | Classification (metal, non-metal, metalloid) |
|-----------|--------|----------------------------|---------------------------------|----------------------------------|---|
| Iodine | | | | | |
| Aluminum | | | | | |
| Copper | | | | | |
| Carbon | | | | | |
| Magnesium | | | | | |
| Silicon | | | | | |
| Sulfur | | | | | |
| Zinc | | | | | |
| Tin | | | | | |

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5) On the periodic table imagine in #3, shade the

-metals -- light green

-metalloids - blue

-non-metals - red

6) Determine the location of each type of element using left of the stair step, staircase, or right of the stair step

Metals _____

Metalloid _____

Non-metals _____

7) Explain why the location of the metalloids makes some sense.**8)** Looking at the big periodic table in the room, the symbols in black are elements that are solid at room temperature, red are elements that are gas at room temperature and blue are liquid at room temperature.**Most elements are** _____ **at room temperature.****Most non-metals are** _____ **at room temperature.****Only** _____ **elements are liquids at room temperature.**